

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Canceled)
2. (Currently amended) A recombinant nucleic acid, comprising a nucleic acid sequence having at least ~~about 90%~~ 95% identity to a nucleic acid sequence selected from the group consisting of the nucleic acid sequences set forth in SEQ ID NOs:1, 3, and 5 or complements thereof, wherein said recombinant nucleic acid ~~or its complement~~ encodes a MINK3 protein.-
3. (Currently amended) A recombinant nucleic acid according to claim ~~1~~ or 2, wherein said nucleic acid comprises a nucleic acid sequence selected from the group consisting of the nucleic acid sequences set forth in SEQ ID NOs:1, 3, and 5 or complements thereof.
- 4-15. (Canceled)
16. (Currently amended) A recombinant nucleic acid, comprising a nucleic acid sequence that encodes a MINK3 protein comprising an amino acid sequence having at least 95% identity to an amino acid selected from the group consisting of the amino acid sequences set forth in SEQ ID NOs:2, 4, and 6.
17. (Currently amended) An expression vector comprising the nucleic acid of claims ~~1~~, 2, or 16.
18. (Previously presented) A host cell comprising the vector of claim 17.

19. (Previously presented) A method of making a MINK3 protein comprising the step of culturing the host cell of claim 18 under conditions suitable for expression of the MINK3 protein.

20. (Previously presented) The method of claim 19, further comprising the step of isolating the MINK3 protein.

21. (New) The recombinant nucleic acid of claim 2, wherein the nucleic acid sequence has at least 98% identity to a nucleic acid sequence selected from the group consisting of the nucleic acid sequences set forth in SEQ ID NOs:1, 3, and 5 or complements thereof.

22. (New) The recombinant nucleic acid of claim 16, comprising a nucleic acid sequence that encodes a MINK3 protein comprising an amino acid sequence having at least 98% identity to an amino acid selected from the group consisting of the amino acid sequences set forth in SEQ ID NOs:2, 4, and 6.

23. (New) The recombinant nucleic acid of claim 16, comprising a nucleic acid sequence that encodes a MINK3 protein comprising an amino acid selected from the group consisting of the amino acid sequences set forth in SEQ ID NOs:2, 4, and 6.

24. (New) The recombinant nucleic acid of claim 16, wherein the MINK3 protein activates a Jun N-terminal kinase (JNK) protein.

25. (New) The recombinant nucleic acid of claim 16, wherein the MINK3 protein activates an ERK protein.

26. (New) The recombinant nucleic acid of claim 16, wherein the MINK3 protein binds to a Nck protein.